

[HOW TO - Retrofit Cruise Control 10MY>](#)

One of the options missing from my car, but something that I really wanted was CCS (cruise control system). I searched the web for info on fitting it and quickly found out about the 'simple way' for the pre Week45 2009 cars , but not much detailed info for the Scirocco's built after this date. It seems that if you've got one of the later cars with the 'combination stalk' (i.e. both left & right stalks all in one unit) then it's a totally different kettle of fish, and significantly more expensive to do.

Truth be told, it's really not that difficult, and if you're willing to shop around you can get it done reasonably cheaply too! I did mine for just £85!! (Well to be honest, it *should* have been £85, if I hadn't of made a schoolboy error and ballsed it up - but more on this later!)



So , Here's a 'HOW TO' , a step by step DIY guide to retro fitting cruise control to you late model Rocco

NOTE - the following instructions / references refer to a RHD 10MY> VW Scirocco. Part numbers are for **reference** only, make sure you've checked whatever you're buying - is suitable for your specific application yourself.

TOOLS

Some plastic trim tools

Tx15 & Tx20 bits & driver

A flat bladed screwdriver (no longer than 165mm with a 7mm blade is ideal)

An M12 or M14 spline tool (My car used an M14 , but other have reported that its an M12 on their car)

A torque wrench capable of applying 30Nm

Some thread locking agent (optional)

PARTS

VW recommend that you replace the steering wheel securing bolt (part # N90799102)

A CCS equipped combination stalk

A CCS control compatible slip ring / controller

There appear to be a whole host of part numbers for the stalks and control units . If you're buying new - then it's easy, Get your VW dealer to sort it!

Buying used, well you're going to have to search forums / eBay like I did. From what I can tell, the stalks are pretty easy - Mine was advertised by the seller as being suitable for "Eos, Golf MK6, Golf Plus, Jetta, Scirocco, Sharan, Tiguan, Touran, Seat Alhambra, Altea, Leon, Skoda Octavia, Superb and Yeti" - My part actually came from a late 2009 Tiguan. So if you know it came from a car equipped with CCS, and it looks the same as the one on your car (only with the extra CCS options on the left hand stalk - obviously) then you're pretty much good to go. If it comes with the controller from the same car - even better!

For reference here are the part numbers that were on my existing (non CCS) 14MY Scirocco GTS TDI , and on the replacement (CCS) parts from eBay

Original parts on car



Labels on Switch assy



Label on slip ring controller

Replacement parts to fit cruise control (from eBay Germany)



Labels on Switch assy



Label on slip ring controller

Now , the above parts worked just fine on my car after coding , but whilst I was messing about with the fit , I ended up breaking the ribbon on the slip ring / controller unit . So I had to buy another slip ring / controller .If you have to buy the slip ring / controller separately then this list of CCS compatible part numbers lifted from the Ross-tech site may be helpful - it certainly helped me! (I've highlighted the CCS compatible controllers)

Control Module Part Number	Variant	Multifunction Display	CCS/ACC	Multifunction Steering Wheel	Suitable for use with DSG
5K0-953-569	Midline	Yes	Yes	-	Yes
5K0-953-569-A	Highline	Yes	-	Yes	Yes
5K0-953-569-B	Highline	TBD	TBD	TBD	TBD
5K0-953-569-C	Midline	TBD	TBD	TBD	TBD
5K0-953-569-D	Highline	Yes	-	Yes	Yes
5K0-953-569-E	Highline	Yes	Yes	Yes	Yes
5K0-953-569-F	Midline	TBD	TBD	TBD	TBD
5K0-953-569-G	TBD	TBD	TBD	TBD	TBD
5K0-953-569-H	Highline	Yes	Yes	Yes	Yes
5K0-953-569-J	TBD	TBD	TBD	TBD	TBD
5K0-953-569-K	Highline	TBD	-	TBD	TBD
5K0-953-569-L	Highline	Yes	Yes	Yes	Yes
5K0-953-569-R	Highline	TBD	TBD	TBD	TBD
5K0-953-569-S	Highline	Yes	-	Yes	Yes
5K0-953-569-T	Highline	Yes	Yes	Yes	Yes
5K0-953-569-AA	Midline	TBD	TBD	TBD	TBD
5K0-953-569-AB	Highline	TBD	TBD	TBD	TBD

IMPORTANT NOTE!! - The above chart hasn't been compiled by me! , It's been lifted directly from the Ross Tech website and posted here for your convenience only. Some forum members have reported problems with the 'L' controller on DSG cars that the 'T' controller doesn't work at all, but that the 'M' controller does work even though it isn't listed. If you're going to source a used controller, then **PLEASE DO YOUR OWN CHECKS to ensure compatibility with your specific car**

so, to continue! - Luckily, I found an 'E' version on eBay. Originally from a 2012 Golf VI for just £40. It was local too - so I went and picked it up and finished off the install.

So now you've collected the parts, you're ready to throw 'em on - let's get going!



METHOD

Before you do anything, do an Autoscan with VCDS, and look closely at the checked / unchecked options in Controller 16 (the steering module) - this way you'll know the exact values / options in your existing controller before you replace it for another one. This is especially important if you are using a second hand controller. You more than likely won't have a clue about what options the donor car did or didn't have (especially if it didn't come from another Scirocco of the same spec / model year). Whether using a new or used controller, you'll want to start from a 'clean sheet' and replicate **exactly** the existing options in your old controller, into your replacement one, *before* you add the coding to enable cruise control. The easiest way to do this is to copy the coding string (e.g. something like 108A04000) from your existing module before you do anything, then at the end (when you've fitted the new stalks & module), paste it into the New Coding box on controller 16. This ensures all the boxes that were checked / unchecked will be the same, and the *only* difference you make is to 'add' the option of CCS. More info on this can be found toward the end of this 'How To'

Set the steering wheel straight ahead. The next job is to remove the steering wheel airbag, so to avoid generating any error codes and more importantly - accidental deployment, read the next bit carefully!

REMOVE THE BATTERY NEGATIVE LEAD WITH THE IGNITION **SWITCHED ON**

In fact - as this is a fairly critical process, here are the official instruction from EKTA the official VW workshop manual

Removing and installing driver airbag unit

Note

t Removal and installation of the airbag unit is described for the multifunction steering wheel.

t The screwdriver mentioned in the following activities should be about 175 mm long and have a blade width of about 7 mm.

Removing

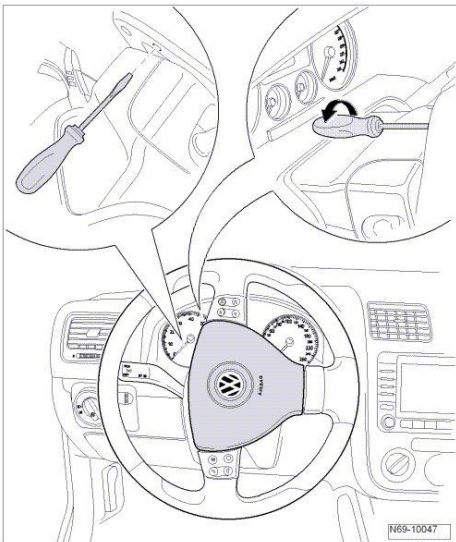
WARNING

t Observe the general safety regulations when working on airbag, belt tensioner and battery isolator units (pyrotechnic components) → Chapter

t Observe the special instructions for driver and front passenger airbags → Chapter.

- Switch ignition on.
- Disconnect vehicle battery → Electrical system; Rep. gr.27.
- Move steering wheel to highest position.
- Extend steering wheel as far as possible into passenger compartment.

- Turn steering wheel to position in illustration.
- Insert a screwdriver into hole in back of steering wheel to stop (approx. 8 mm).
- Turn screwdriver towards driver's door -arrow-. This releases airbag unit fastener on right side of steering wheel.
- Turn steering wheel 180° and release airbag unit fastener on left side of steering wheel as described.
- Turn steering wheel back through 90° to middle position.
- Remove airbag unit from steering wheel.



WARNING

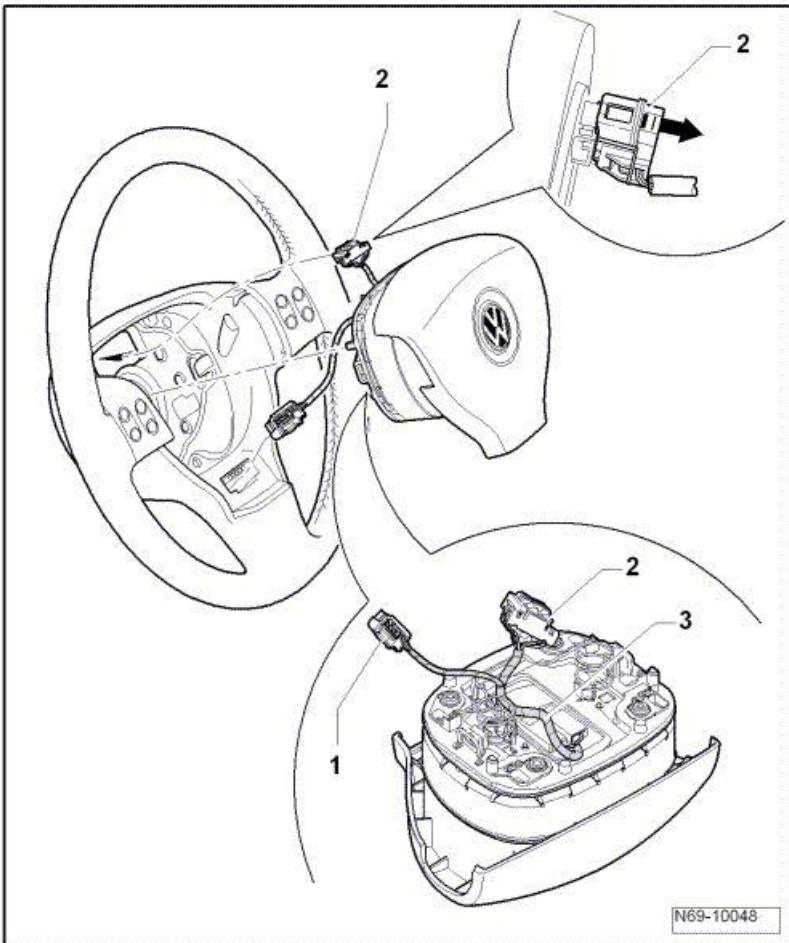
Electrostatic discharges may result in unintentional triggering of airbag. Therefore, the mechanic must electrostatically discharge him/herself before disconnecting the igniter and earth wires. This can be done by briefly touching the body or striker plate of the door.

– Operate connector locking device and pull connector -1- off.

Note

This connector is only installed on vehicles with a multifunction steering wheel.

– Operate connector locking device -in direction of arrow- and pull airbag connector -2- off.



Refit the driver's airbag in the reverse order of removal. When re-assembly is complete, Switch ignition on.

WARNING

Ensure that nobody is in vehicle.

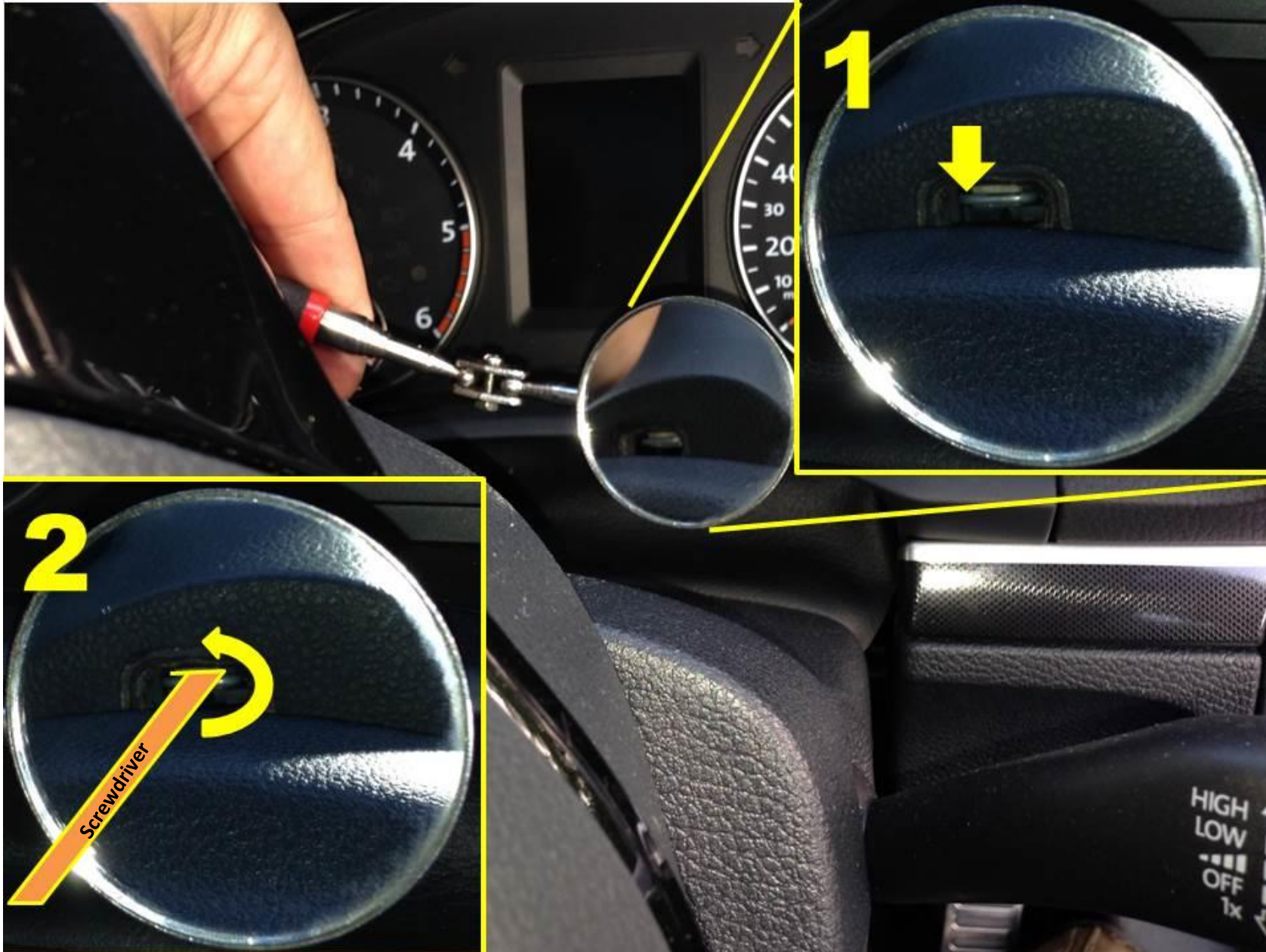
– Reconnect vehicle battery → Electrical system; Rep. gr.27.

I found removing the airbag to be really tricky, so here are some better pics of what you need to do!

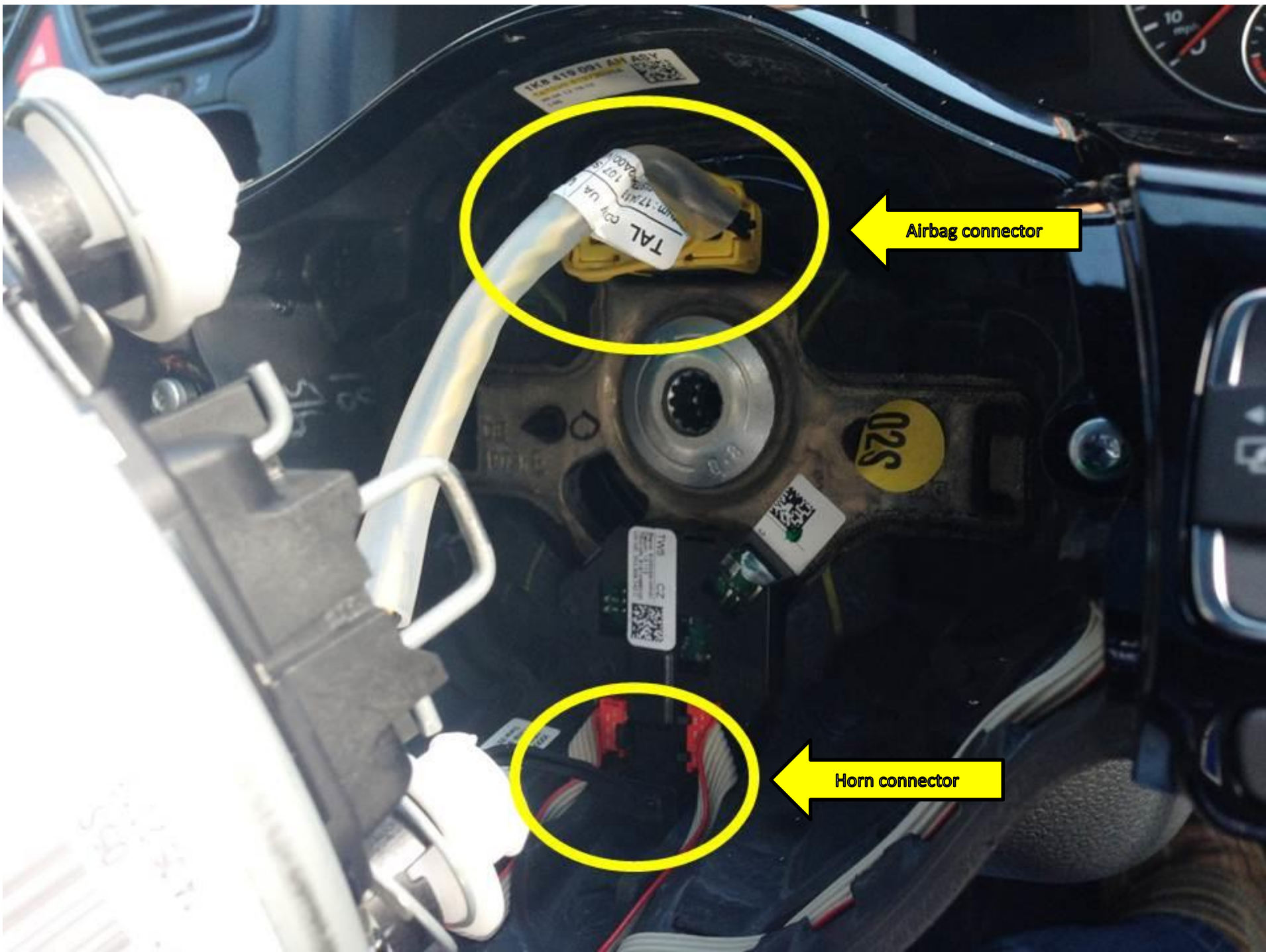
1st) when using the screw driver to release the spring loaded clip , cover your clocks with some cloth to prevent scratching the screen with the back of the screwdriver



2nd) I used a little mirror so that I could see what I was doing , you need to push the spring down at the back of the steering wheel(by twisting the screwdriver) and to pull the airbag toward you at the same time - you need to move the spring on the airbag far enough to clear the notch cast into the steering wheel , to allow you to pull the airbag away from the wheel - the mirror really helps !

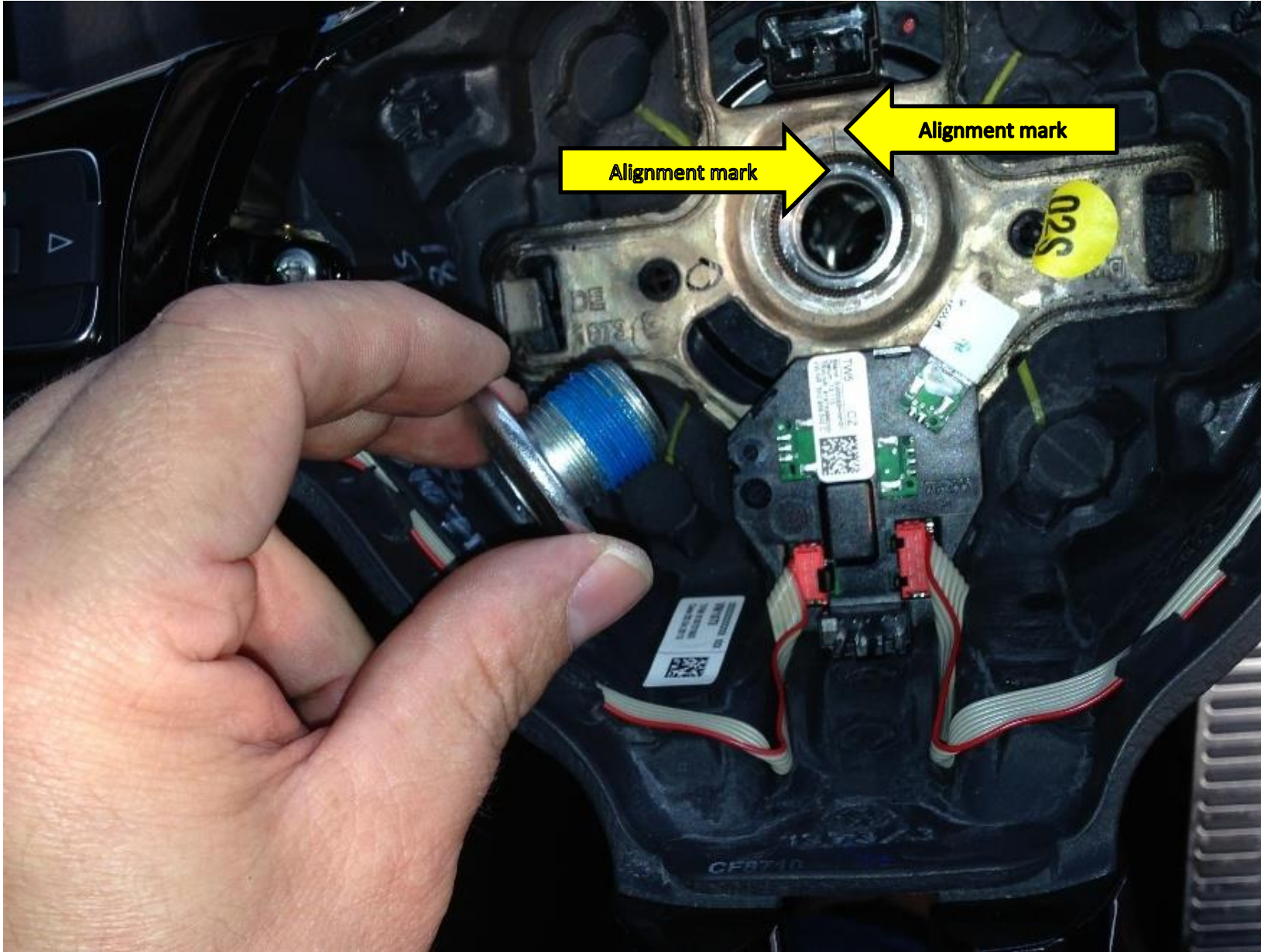


With the airbag clips released , you need to release the two wiring connectors , the big yellow one at the top is for the airbag , you need to pull the white 'locking tab' first , the pull the connector . The black wire at the bottom is for the horn



Now you can safely store the airbag out of harm's way - store it FACING UPWARD.

Next, we need to remove the wheel – Undo and remove the bolt out of the centre using an M14 Spline tool on a ratchet / breaker bar -it's fairly tight

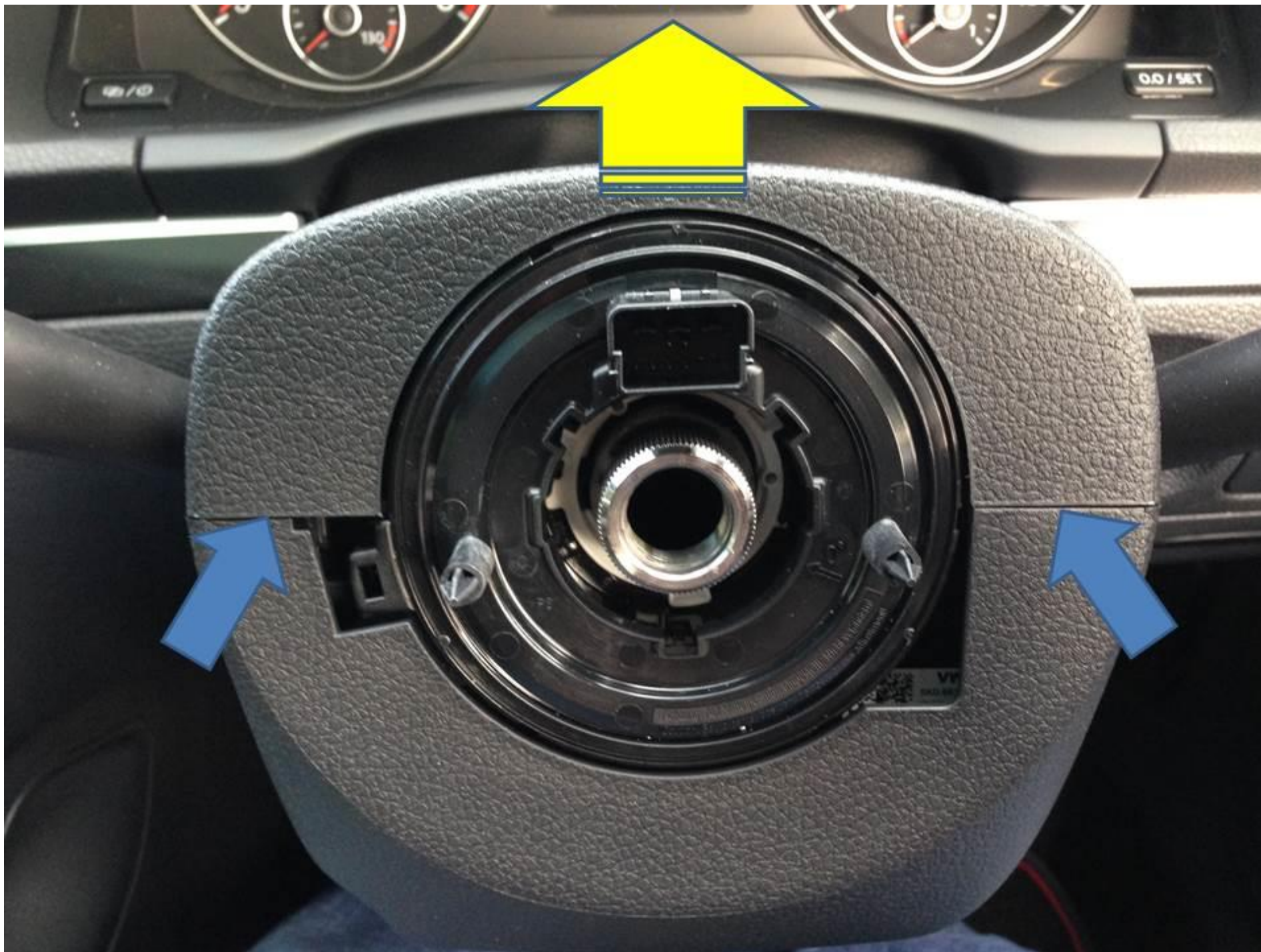


Note the timing marks on the wheel and the column (they should be aligned!), with the front wheels pointing straight ahead, it's safe to remove the steering wheel and put it aside.

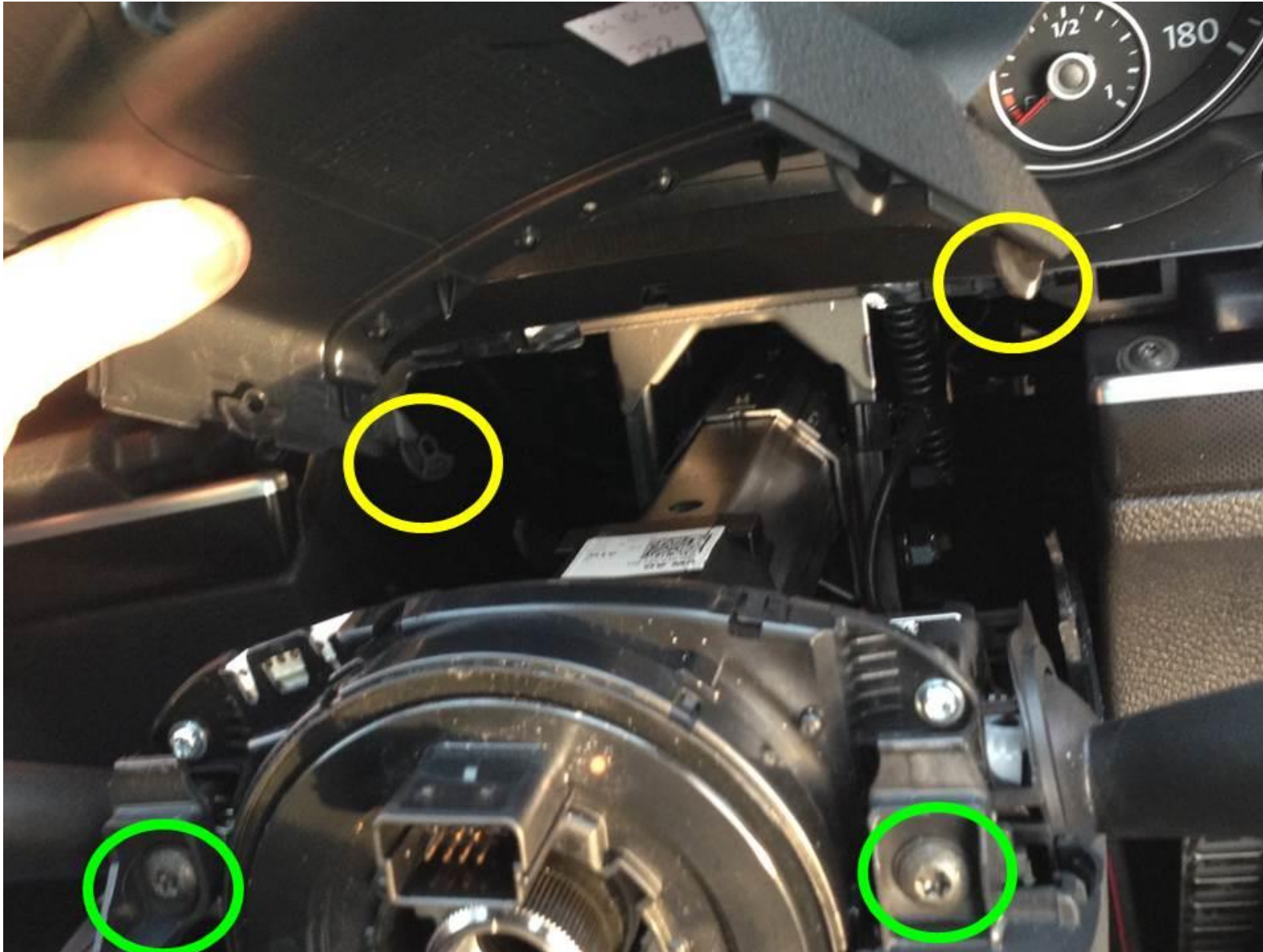
Next, we need to remove the upper column shroud - pull the centre trim above the shroud toward you, releasing it from the 2 clips



Then use a trim tool at the joint of the upper and lower shrouds, lever the upper shroud upwards

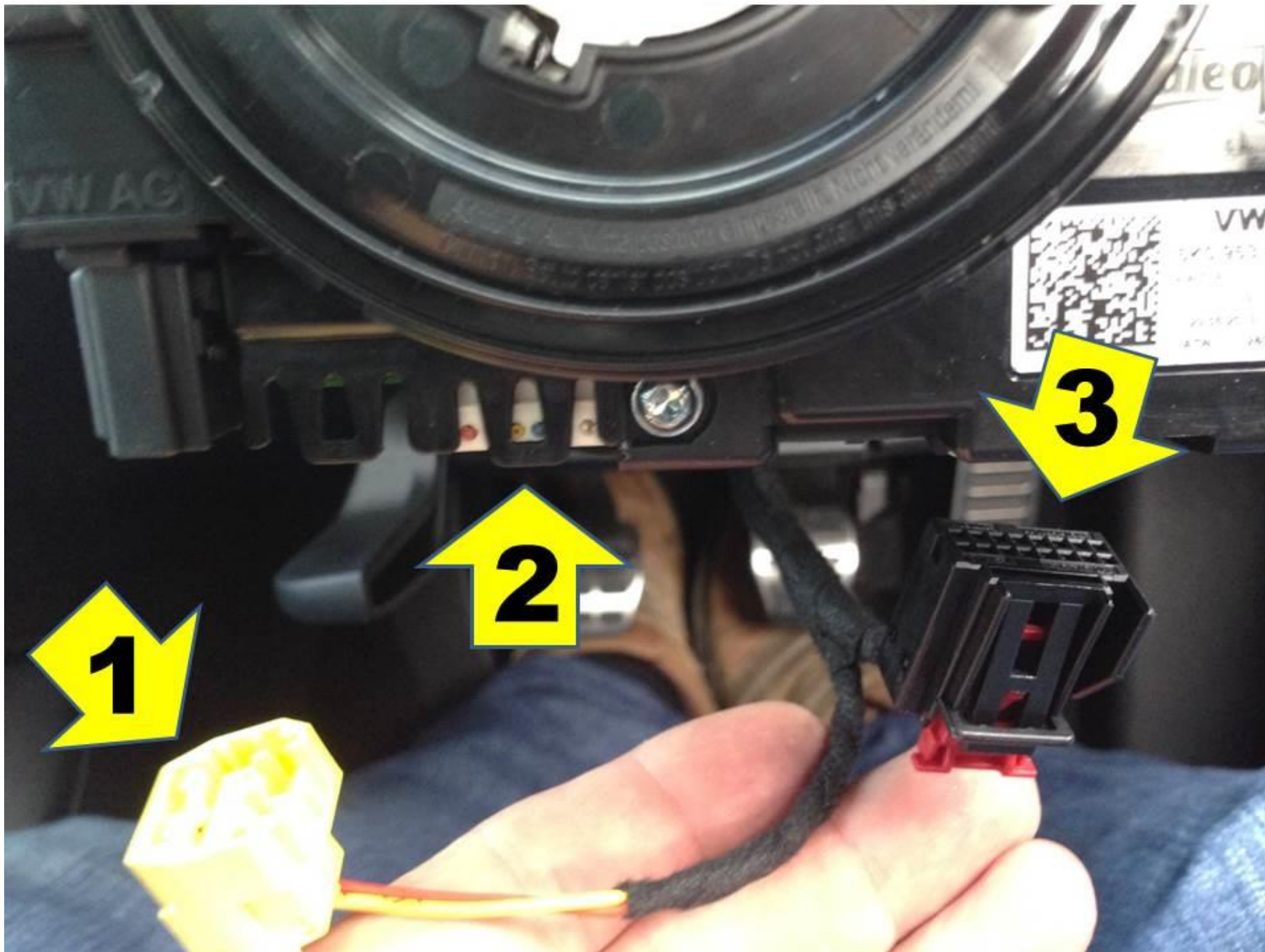


The upper cowl pivots around the two 'hooked' clips at the back (circled in yellow), swing the cowl upwards and then pull rearwards remove it.

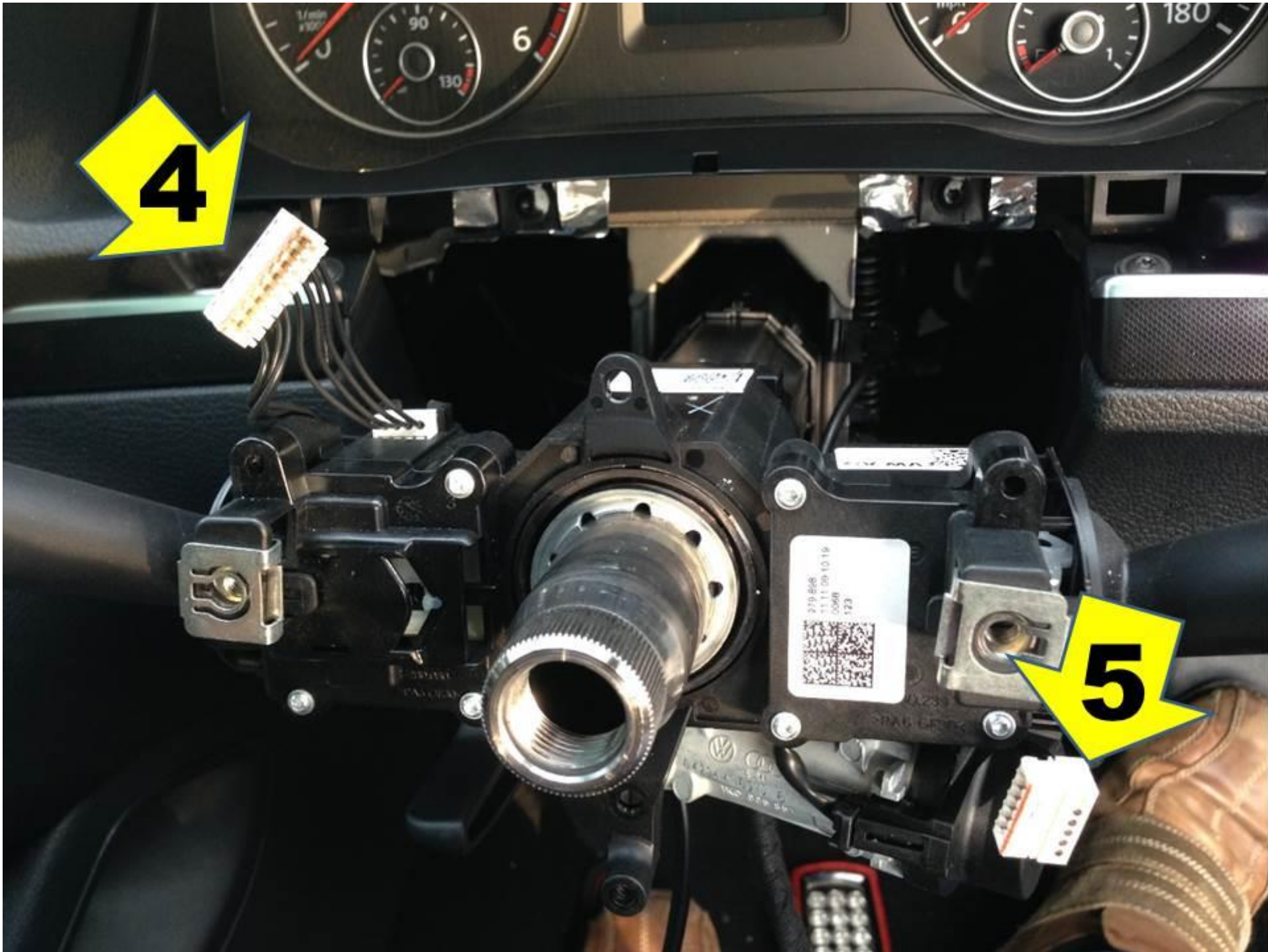


The lower cowl is secured by 3 TX20 screws. The front 2 are circled in green, and the last one is underneath, near the column adjusting lever. Remove all 3 screws, remove the ignition key and manoeuvre the lower cowl away.

With the upper & lower cowls out of the way - you can now see what you're dealing with - hopefully the cruise control parts you've got , look very similar to the bits already fitted to your car ! . The slip ring / controller needs to be removed first. Pull the locking tabs on the red (3) and the yellow (1) connector, so that you can push the retaining clips in and remove the plugs. Then remove the white (2) plug in the middle.



Next, remove the other two white plugs (4) & (5), and the 3 Tx15 screws that secure the slip ring to the stalks, and pull it toward you to release.



Now you need to remove the existing stalks, they are secured to the bracket on the column by 3 clips. 1 clip either side, and one underneath in the centre. Release the clips and slide the stalk assy toward you and off the column.



Fit your replacement (Cruise control) stalk assy - it just slides on until it clips into place.

Make sure the indicator stalk (on the left) is in the middle (rest) position, and slide on the replacement (Cruise control) slip ring. There are 2 prongs on the back to aid alignment. Fit the 3 Tx15 screws to secure the slip ring to the stalks.

IMPORTANT This is where I went wrong! , New slip rings come with a peg, which secures the slip ring in the central position. If you're dealing with used parts (like I was) then you **MUST** make sure that the slip ring is orientated centrally. Inside the slip ring is a ribbon, it's arranged like a clock spring and allows the electrical signals to transfer from the airbag & steering wheel controls to the rest of the car. It can only rotate about 5 times from the extreme left to the extreme right. If it's positioned off centre, when you put it all back together and rotate the steering wheel from lock to lock you will snap the ribbon and effectively scrap the whole slip ring / controller unit.



To make sure that it's positioned centrally, use very light finger pressure to rotate it anticlockwise all the way to the left - as soon as you feel a change in resistance - STOP. Now (again using very light finger pressure) rotate the slip ring clockwise to the right , counting out loud every time you pass the centre (12 o'clock) position , until you feel a change in resistance to the right - STOP . Divide the number you counted in half, and rotate it back to the left until you reach this half way point. It should now be positioned centrally .Example - If you had about '5' full turns from left to right , then roll it back 3 times - Then from this (central) position , you should have 2 and a bit full turns to the left and 2 and a bit full turns to the right . It all sounds a lot harder in writing than it actually is - if I could show a video , you'd see that it's a pretty simple process really , and fairly straight forward to ensure that the slip ring is located centrally !

Ok, now that your new parts are in place, it's time to throw it all back together!

Refit the lower cowl, fit the 3 TX20 screws, then refit the upper cowl and clip it into place.

Fit the steering wheel, taking care to line up the alignment marks on the wheel to the column.

Next, VW recommends you fit a new bolt. This is because it has a thread locking patch (the blue stuff). To get a bit technical for a minute, it's actually known as a 'micro encapsulated patch' - tiny little balls of glue that start to set when the skin is broken. It's a 'one use only' kind of thread locker, its advantage is that it's a 'non messy' solution for mass production. None of my local VW dealers had this bolt in stock (suggesting that they probably don't replace them as a matter of course), so instead I cleaned off the patch with a wire brush.



And re-used the bolt with a coating of Loctite thread locking liquid

First secure the bolt to 30Nm. You then need to keep tightening by a further 90° (e.g. from 12 o'clock to 3 o'clock) - It takes quite a bit of effort to get the full 90° , so use a long bar

to apply the torque , but **do not** apply load against the steering lock - you'll damage it ! . Instead, put the key back in the ignition and turn it to the on position (the battery is still disconnected remember) this will disengage the steering lock so that you've no chance of damaging it. Get a friend to hold the wheel if you're struggling to apply the torque required to get to 90°

Now refit the airbag.

Offer the bag up to the wheel, fit the black connector first, then the yellow. Make sure you push the white locking tab back into place to secure the airbag connector
Position the airbag back into place and give it a firm shove - the clips you struggled to release earlier will flick back over the steering wheel lugs and the airbag should now be sitting centrally within the wheel and be secure.

Sit back and admire your handiwork



We're now ready to refit the battery and code the necessary modules.

RE FIT THE BATTERY NEGATIVE LEAD WITH THE IGNITION **SWITCHED ON**

Ok, with the battery reconnected (whilst the ignition was left switched on), you should not have any Airbag warning lights on the dash. You will have the usual ESP light / warning. Start the car and rotate the steering from lock to lock to extinguish these lights. Now all we need to do is the coding via VCDS / Vag-Com

CODING THE CONTROLLERS

With your laptop out and VCDS running, it's time to perform the necessary coding. There are 2 items of coding that are needed

- Address 01 – Coding - Byte 05 – Bit 5-6 : select “20-Cruise Control System (CCS) installed”
- Address 16 – Coding - Byte 02 – Bit 4-7 : select “10-Cruise Control controlled via Turn Signal Lever”

The above info is fine if you know what you're doing with VCDS - but if you've only just bought / borrowed your cable - then it may be a bit daunting. Fear Not! - Here is a step by step guide and it's actually pretty self-explanatory and quite easy to work out :-)

The first thing you'll need to know, is where to plug the cable in - On the Scirocco, the diagnostic port is under the RHS of the dash, near the kick panel / bonnet release



Fire up the laptop, make sure you have it running on mains power (Ross-tech warns that you don't want the battery going flat half way through a coding operation!). As good

practice, you should run an Autoscan and save the results

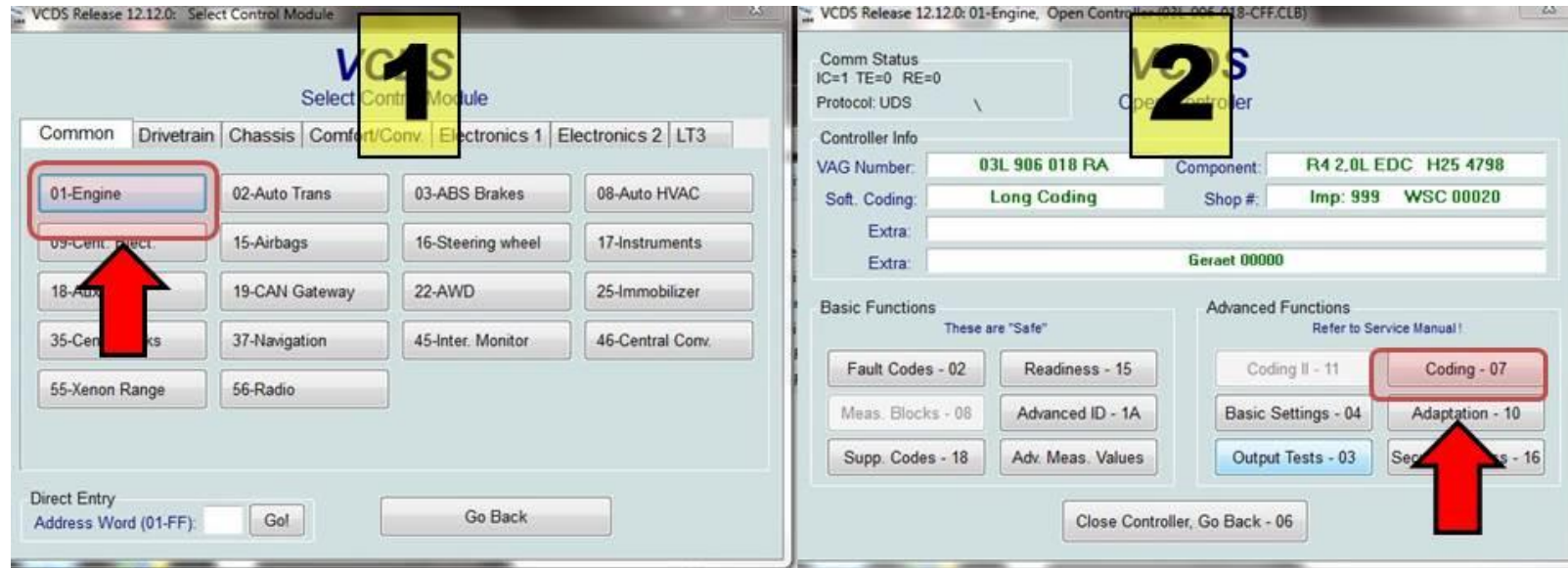
So, lets code the 1st module - It's doesn't matter which one you do first, but I did the Engine controller first.

1) From the 'Select Control Module' screen, mouse over to '01-Engine' - click on it - this takes you to Address 01

2) mouse over to 'Coding-07' - click on it - this takes you to the coding window

3) mouse over to 'long coding helper' - click on it - this takes you to the business end , where you actually change the coding of the controller

4) 'Bytes & Bits' - Line 3 is where you select the appropriate Byte . On this module we need byte 05 - Use your mouse to select the Byte you want -You know when you're on the right one when the font colour is yellow. Line 4 shows the available Bits. Click on the drop down menu next to Bit 5-6 : select "20-Cruise Control System (CCS) installed". With this selected you're ready to apply the changes. Now click on 'Exit' to save your changes to the next screen.



5) The next window that pops up gives you the options to save the changes (to 're-code' the controller). It's a bit long to write down, so copy & paste the value in the 'Current coding'

box to a text file and save it to your desktop .This way, if you make a hash of things, you can then re-enter the original coding to return the module to its original state. Click 'Do it!' to apply the new coding.

6) You'll get a confirmation message telling you that the controller has accepted the new coding.

7) You are now returned to this screen - click 'Close controller, Go back -06'

😊 this takes you back to the Select control module screen

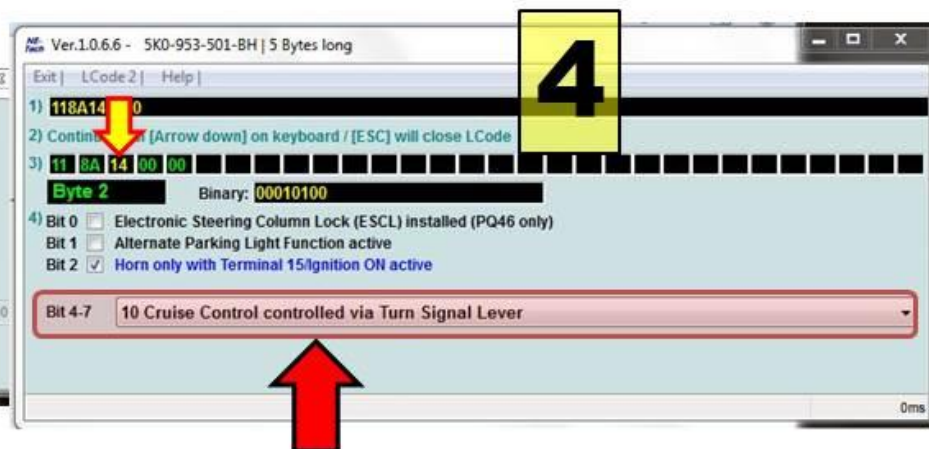
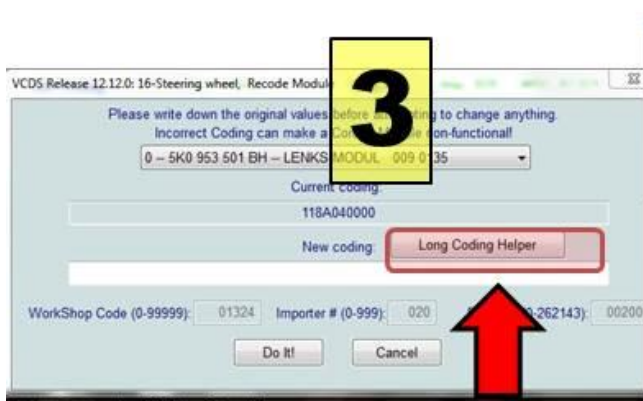
The image shows two screenshots from the VCDS software. The left screenshot, labeled with a yellow box containing the number '5', is the 'Recode Module' screen. It displays a dropdown menu with '0 -- 03L 906 018 RA -- R4 2,0L EDC H25 4798'. Below it, the 'Current coding:' field shows '00190012040500080000' and the 'New coding:' field shows '00190012042500080000'. A 'Long Coding Helper' button is visible. At the bottom, there are fields for 'WorkShop Code (0-99999): 00020', 'Importer # (0-999): 999', and 'Equipt # (0-262143): 00000'. A red arrow points to the 'Do It!' button. The right screenshot, labeled with a yellow box containing the number '6', shows a 'Coding accepted' dialog box with an 'OK' button. A red arrow points to the 'OK' button.

The image shows two screenshots from the VCDS software. The left screenshot, labeled with a yellow box containing the number '7', is the 'Controller (1K0-937-08X-09.CLB)' screen. It displays 'Comm Status: IC=1 TE=0 RE=0 Protocol: CAN'. Under 'Controller Info', it shows 'VAG Number: 5K0 937 087 AB' and 'Component: BCM PQ35 H 122 0173'. Below that, it shows 'Soft. Coding: Long Coding' and 'Shop #: Imp: 790 WSC 00020'. There are also 'Extra:' fields with codes like '19551196 Wischer 16041'. At the bottom, there are 'Basic Functions' and 'Advanced Functions' sections. A red arrow points to the 'Close Controller, Go Back - 06' button. The right screenshot, labeled with a yellow box containing the number '8', is the 'Select Control Module' screen. It shows a grid of buttons for various modules: '01-Engine', '02-Auto Trans', '03-ABS Brakes', '08-Auto HVAC', '09-Cent. Elect.', '15-Airbags', '16-Steering wheel', '17-Instruments', '18-Aux. Heat', '19-CAN Gateway', '22-AWD', '25-Immobilizer', '35-Centr. Locks', '37-Navigation', '45-Inter. Monitor', '46-Central Conv.', '55-Xenon Range', and '56-Radio'. A red arrow points to the 'Go Back' button.

Ok , that's the first one done , now we need to code the slip ring / controller (steering wheel module) . If you've bought a used slip ring / controller, there's a good chance it's already

coded for Cruise Control, but it may have other options checked from its parent vehicle that you don't need - this is why I recommended that you have a good look at your existing controller at the very first step, and copy the existing coding over, as I described at the very start. Controller 16 should have EXACTLY the same options selected as your original (non CCS controller) apart from the following **one**.

- 1) From the 'Select Control Module' screen, mouse over to '16-Steering Wheel' - click on it - this takes you to Address 16
- 2) mouse over to 'Coding-07' - click on it - this takes you to the coding window
- 3) mouse over to 'long coding helper' - click on it - this takes you to the business end , where you actually change the coding of the controller
- 4) 'Bytes & Bits' - Line 3 is where you select the appropriate Byte . On this module we need byte 02 - Use your mouse to select the Byte you want -You know when you're on the right one when the font colour is yellow. Line 4 shows the available Bits. Click on the drop down menu next to Bit 4-7 : select "10-Cruise Control controlled via Turn Signal Lever". With this selected you're ready to apply the changes. Now click on 'Exit' to save your changes to the next screen.



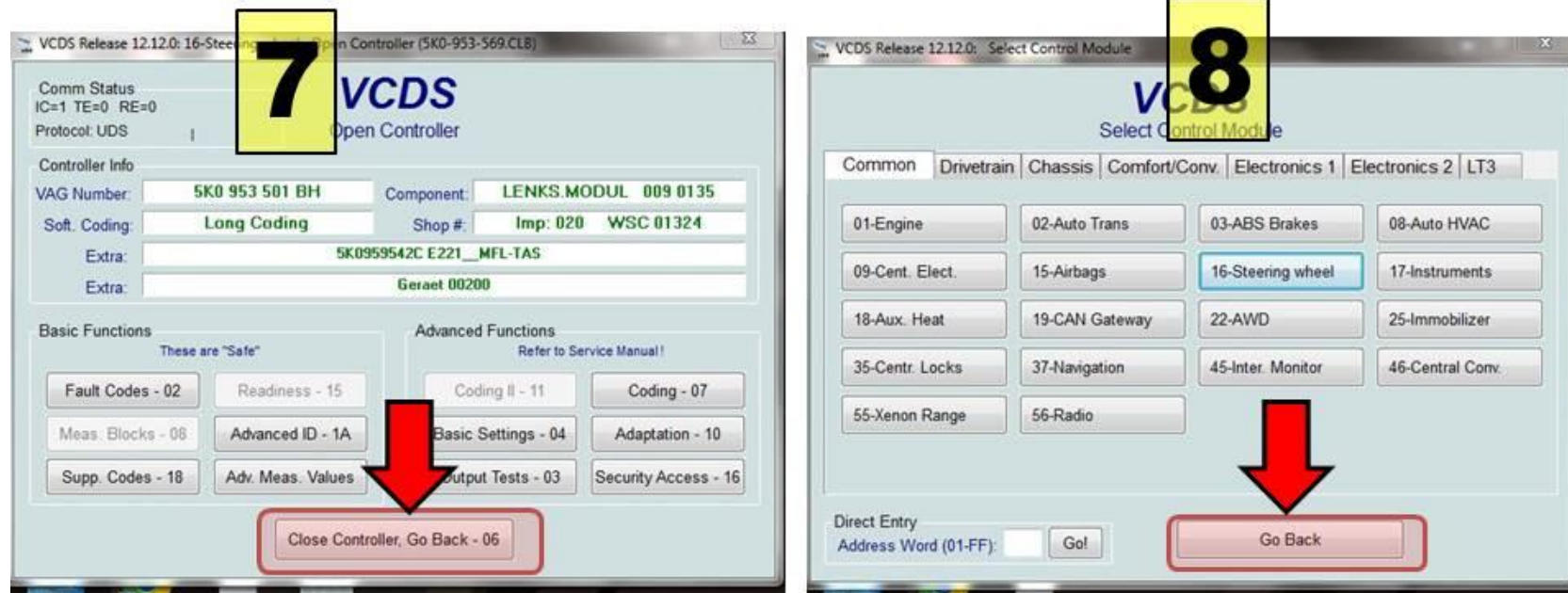
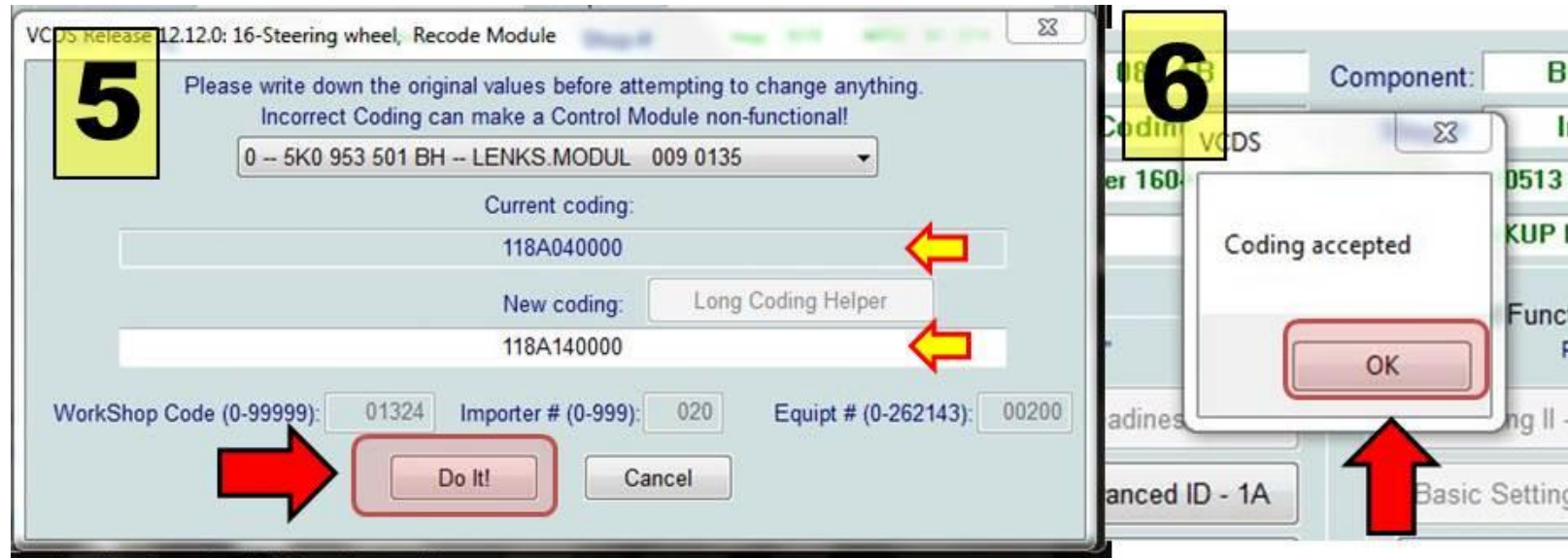
5) The next window that pops up gives you the options to save the changes (to 're-code' the controller). It's a bit long to write down, so copy & paste the value in the 'Current coding'

box to a text file and save it to your desktop .This way, if you make a hash of things, you can then re-enter the original coding to return the module to its original state. Click 'Do it!' to apply the new coding.

6) You'll get a confirmation message telling you that the controller has accepted the new coding.

7) You are now returned to this screen - click 'Close controller, Go back -06'

😊 this takes you back to the Select control module screen, Exit this to go to the VCDS home screen.



9) If you've coded a second hand controller - there may well be faults stored in there from its previous life. Perform an Auto scan, and then clear any DTC's if necessary. Perform

another Autoscan to ensure there are no 'hard' or permanent faults, - with a clean bill of health, you're done!

If you've done everything right , with the Ignition on and the cruise switch set to 'ON' , you'll see the little cruise icon in the MFD - don't worry , it's only greyed out because you're not moving



Pack your laptop away and get ready to test out your new feature . As the battery has been disconnected, you'll need to reset the door windows (by lowering and raising them a few

times), and also the date and time on your audio system.

Out on the road, when cruise is selected, you should see something like this :-)



There you go! , I hope you found this guide useful and that it's taken away any doubt you may have had about tackling this job yourself.

Please don't PM me with any questions, but rather add them to the forum thread so that everyone benefits from the info.

All the best

UK Lee

Footnote: This downloadable Microsoft Word document was created to be hosted on the Roccopedia webpage. The How To Guide was originally a forum post by UK Lee, but since photobucket changed their image hosting policy, all of the pictures were lost. The original forum post is still present (minus pictures) here >

<http://www.sciroccocentral.co.uk/forum/viewtopic.php?f=38&t=14802>

There are some useful discussions in the post, and if you have any questions – then this is the place to post them.